

CLAIMS

1. An impurity disposal system for disposing underground, impurities in a natural gas or an oil accompanying gas, comprising:

- 5 an impurity removing apparatus that removes the impurities in a gaseous state;
- a compressor that compresses the removed impurity gas; and
- a drying apparatus that removes a water in the
- 10 compressed impurity gas, wherein
- a dried and compressed impurity gas is disposed into an underground aquifer.

2. The impurity disposal system according to claim 1,
15 wherein

 the impurity gas is carbon dioxide or hydrogen sulfide.

3. The impurity disposal system according to claim 1,
wherein
20 a drive that drives the compressor is a gas turbine, a
gas engine, or a steam turbine.

4. The impurity disposal system according to claim 3,
comprising:
25 a carbon dioxide removing apparatus that removes

 carbon dioxide discharged from the drive and an equipment
accompanying the drive, wherein

 the carbon dioxide removed by the removing apparatus
is mixed with the impurity gas and a resultant mixture gas
30 is disposed into the underground aquifer.

5. The impurity disposal system according to claim 3,
wherein

steam from a boiler that recovers a waste heat discharged from the gas turbine or the gas engine is used for a heat source during removal of impurities.

- 5 6. An impurity disposal method for disposing underground, impurities in a natural gas or an oil accompanying gas, comprising steps of:

removing the impurities in a gaseous state;
compressing the removed impurity gas;
10 removing a water in the compressed impurity gas; and
disposing the dried and compressed impurity gas into an underground aquifer.

7. The impurity disposal method according to claim 6,

15 wherein

the impurity gas is carbon dioxide or hydrogen sulfide.

8. The impurity disposal method according to claim 6,

wherein

20 a drive that drives the compressor that compresses the impurity gas is a gas turbine, a gas engine, or a steam turbine.

9. The impurity disposal method according to claim 8,

25 comprising:

removing carbon dioxide discharged from the drive and an equipment accompanying the drive, wherein

the carbon dioxide is mixed with the impurity gas and a resultant mixture gas is disposed into the underground

30 aquifer.

10. The impurity disposal method according to claim 8,

wherein

steam from a boiler that recovers a waste heat discharged from the gas turbine or the gas engine is used for a heat source during removal of impurities.